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AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) An arrangement for combining narrowband and broadband transport mechanisms in a communications network, comprising:

a narrowband component, said narrowband component including switching intelligence and narrowband switching fabric, ~~said narrowband component adapted to terminate incoming sides and outgoing sides of communications;~~

a broadband component in communication with the narrowband component, said broadband component including broadband switching fabric, ~~said broadband component adapted to terminate at least outgoing sides of communications;~~ and

~~wherein the arrangement is capable of terminating an incoming side and an outgoing side of a first communication at said narrowband component, and the arrangement is capable of terminating an incoming side of a second communication at said narrowband component and an outgoing side of the second communication at said broadband component~~

wherein, when a first communication, destined for a node that has only narrowband capabilities, is received in the narrowband component, the switching intelligence in the narrowband component utilizes the narrowband switching fabric to route the communication to the narrowband destination node, and

wherein, when a second communication, destined for a node that has broadband capabilities, is received in the narrowband component, the switching intelligence in the narrowband component utilizes the broadband switching fabric in the broadband component to route the communication to the broadband destination node.

2. (Currently Amended) The arrangement according to claim 1, wherein ~~said broadband component is further adapted to terminate incoming sides of communications, and the arrangement is further capable of terminating an incoming~~

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side and an outgoing side of a third communication at said broadband component when a third communication, destined for a node that has broadband capabilities, is received in the broadband component, the broadband component utilizes the broadband switching fabric to route the communication to the destination.

3. (Original) The arrangement according to claim 2, wherein the third communication is serviced by at least one telecommunications feature via said narrowband component.

4. (Original) The arrangement according to claim 1, wherein said broadband component relies on the switching intelligence of said narrowband component.

5. (Original) The arrangement according to claim 1, wherein said narrowband component includes a synchronous transfer mode (STM) switch, and said broadband component includes an asynchronous transfer mode (ATM) switch.

6. (Original) The arrangement according to claim 1, further comprising at least one circuit emulator, said at least one circuit emulator adapted to enable said broadband component to emulate a circuit with respect to said narrowband component.

7. (Original) The arrangement according to claim 1, wherein said broadband component is adapted to emulate a circuit connection for the outgoing side of the second communication at said broadband component.

8. (Currently Amended) A system for combining narrowband applications with broadband transport in a communications network, comprising:

a first logical node that includes a first circuit-based switch and a first packet-based switch, wherein the first circuit-based switch has access to call control logic; and
a second logical node connected to the first logical node, said second logical node including a second circuit-based switch and a second packet-based switch;

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~~a first logical node, said first logical node including a first circuit-based switch and a first packet-based switch, said~~ wherein the first logical node is adapted to route communications between the first circuit-based switch and the first packet-based switch, and between the first circuit-based switch and the second circuit-based switch in the second logical node the first circuit-based switch having access to call control logic;

~~a second logical node, said second logical node connected to said first logical node, said second logical node including a second circuit-based switch and a second packet-based switch, said~~ wherein the second logical node is adapted to route communications between the second circuit-based switch and the second packet-based switch; and

wherein the call control logic may selectively propagate a given communication ~~may be propagated~~ on a broadband transport mechanism or a narrowband transport mechanism between said first logical node and said second logical node.

9. (Original) The system according to claim 8, wherein a connection across the narrowband transport mechanism may be established between the first circuit-based switch and the second circuit-based switch, between the first circuit-based switch and the second packet-based switch, between the first packet-based switch and the second circuit-based switch, and between the first packet-based switch and the second packet-based switch.

10. (Original) The system according to claim 9, wherein the first packet-based switch and the second packet-based switch may establish connections across the narrowband transport mechanism using at least one circuit emulator each.

11. (Original) The system according to claim 8, wherein a connection across the broadband transport mechanism may be established between the first packet-based switch and the second packet-based switch.

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12. (Original) The system according to claim 8, wherein said first logical node is adapted to receive an incoming side of a communication and to forward an outgoing side of the communication from the first packet-based switch over the broadband transport mechanism to the second packet-based switch.

13. (Original) The system according to claim 12, wherein the incoming side of the communication is terminated by the first circuit-based switch.

14. (Original) The system according to claim 12, wherein the incoming side of the communication is terminated by the first packet-based switch.

15. (Original) The system according to claim 12, wherein said first logical node is further adapted to at least one of interface with and provide access to a telecommunications service for the communication prior to forwarding the outgoing side of the communication.

16. (Original) The system according to claim 8, wherein said first logical node is adapted to receive an incoming side of a communication at the first packet-based switch and to forward an outgoing side of the communication from the first circuit-based switch.

17. (Currently Amended) A method for enabling a migration of a narrowband network to a broadband transport mechanism, comprising the steps of:

connecting a first control node having call control functionality and connection control functionality to a second control node having only connection control functionality;

receiving, at [[a]] the first control node ~~having call control functionality and connection control functionality~~, a first communication in a first format;

forwarding, from the first control node to a first destination node, the first communication in the first format;

receiving, at the first control node, a second communication in the first format;

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routing, by the first control node, the second communication to ~~[[a]]~~ the second control node, ~~the second node having connection control functionality~~; and
forwarding, from the second control node to a second destination node, the second communication in a second format.

18. (Original) The method according to claim 17, wherein the first format comprises a time division multiplexed (TDM) format, and the second format comprises an asynchronous transfer mode (ATM) format.

19. (Currently Amended) The method according to claim 17, wherein the first control node includes a synchronous transfer mode (STM) switch, and the second control node includes an asynchronous transfer mode (ATM) switch; and wherein the first control node is directly connected to the control second node.

20. (Currently Amended) The method according to claim 17, further comprising the steps of:

receiving, at the second control node, a third communication in the first format;
and

forwarding, from the second control node, the third communication in the second format.

21. (Currently Amended) The method according to claim 17, further comprising the steps of:

receiving, at the second control node, a third communication in the second format; and

forwarding, from the second control node, the third communication in the second format.

22. (Currently Amended) The method according to claim 21, further comprising, after said step of receiving a third communication and before said step of forwarding the third communication, the steps of:

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routing the third communication from the second control node to the first control node;

providing a telecommunications service for the third communication via the first control node; and

routing the third communication from the first control node back to the second control node.

23. (Currently Amended) A method for enabling a migration of a narrowband network to a broadband transport mechanism, comprising the steps of:

receiving, at a first narrowband control node having call control functionality and connection control functionality, a first communication in a first format;

forwarding, from the first narrowband control node to a narrowband destination node, the first communication in the first format;

receiving, at a second broadband control node having connection control functionality, a second communication in a second format;

routing, by the second broadband control node, the second communication to the first narrowband control node; and

forwarding, from the first narrowband control node, the second communication in the first format.

24. (Currently Amended) The method according to claim 23, wherein said step of routing, by the second broadband control node, the second communication to the first narrowband control node is performed by the second broadband control node responsive to at least one instruction from the first narrowband control node.

25. (Currently Amended) A method for enabling a gradual migration from a primarily narrowband network to a primarily broadband network, comprising the steps of:

receiving a communication having an identifier that corresponds to a destination terminal of the communication;

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analyzing the identifier that corresponds to the destination terminal of the communication;

determining whether the identifier is associated with a network node having broadband capability; and

if [[so]] the identifier is associated with a network node having broadband capability, forwarding the communication over a broadband transport mechanism.

26. (Currently Amended) The method according to claim 25, further comprising the step of:

if [[not]] the identifier is not associated with a network node having broadband capability, forwarding the communication over a narrowband transport mechanism.

27. (Original) The method according to claim 25, wherein said step of receiving a communication having an identifier that corresponds to a destination terminal of the communication comprises the step of receiving the communication on a broadband transport mechanism.

28. (Original) The method according to claim 25, wherein said step of receiving a communication having an identifier that corresponds to a destination terminal of the communication comprises the step of receiving the communication on a narrowband transport mechanism.

29. (Currently Amended) The method according to claim 25, wherein the identifier comprises a ~~B-number~~ called directory number; and wherein said step of analyzing the identifier that corresponds to the destination terminal of the communication comprises the step of analyzing, via a narrowband group switch, the identifier.

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30. (Original) The method according to claim 25, wherein said step of determining whether the identifier is associated with a network node having broadband capability comprises the step of comparing the identifier to a plurality of entries in a data structure.

31. (Original) The method according to claim 30, wherein the data structure includes bearer type information.

32. (Original) The method according to claim 25, wherein said step of determining whether the identifier is associated with a network node having broadband capability comprises the step of determining a proximity between the network node and the destination terminal.

33. (Original) The method according to claim 25, further comprising the step of determining whether an identifier that corresponds to an origination terminal is associated with a network node that has broadband capability.

34. (Currently Amended) An arrangement for combining narrowband and broadband transport mechanisms in a communications network, comprising:

means for providing switching intelligence;

means for providing narrowband switching, said means for providing narrowband switching having operative access to said means for providing switching intelligence;

means for providing broadband switching, said means for providing broadband switching connected to said means for providing narrowband switching;

means for forwarding an incoming narrowband communication as an outgoing narrowband communication utilizing said means for providing narrowband switching, upon determining that the destination for the narrowband communication is capable only of narrowband communications; and

means for converting and forwarding an incoming narrowband communication as an outgoing broadband communication utilizing said means for providing narrowband switching and said means for providing broadband switching, upon determining that the

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destination for the narrowband communication is capable of broadband communications.

35. (Original) The arrangement according to claim 34, further comprising:
means for converting and forwarding an incoming broadband communication as an outgoing narrowband communication utilizing said means for providing broadband switching and said means for providing narrowband switching.

36. (Original) The arrangement according to claim 34, further comprising:
means for providing access to an intelligent network (IN) service; and
wherein said means for providing broadband switching has operative access to said means for providing an IN service via said means for providing narrowband switching.

37. (Currently Amended) A method for combining narrowband applications with broadband transport in a communications network, comprising:

terminating a time division multiplexed (TDM) inbound side of a first communication at a circuit switch;

if the destination for the first communication has only TDM communications capability;

switching the first communication by the circuit switch; and

terminating a TDM outbound side of the first communication at the circuit switch;

terminating a TDM inbound side of a second communication at the circuit switch;

switching the second communication by the circuit switch; and

if the destination for the second communication has asynchronous transfer mode (ATM) communications capability;

switching the second communication by a packet switch connected to the circuit switch; and

terminating an ~~asynchronous transfer mode (ATM)~~ ATM outbound side of the second communication at the packet switch.

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38. (Original) The method according to claim 37, further comprising the steps of:

terminating an ATM inbound side of a third communication at the packet switch;
switching the third communication by the packet switch;
switching the third communication by the circuit switch; and
terminating a TDM outbound side of the third communication at the circuit switch.

39. (Original) The method according to claim 37, further comprising the steps of:

terminating an ATM inbound side of a third communication at the packet switch;
switching the third communication by the packet switch;
switching the third communication by the circuit switch;
providing a telecommunications service for the third communication via the circuit switch; and

at least one of the following steps:

terminating an ATM outbound side of the third communication at the packet switch; and

terminating a TDM outbound side of the third communication at the circuit switch.

40. (Original) The method according to claim 37, further comprising the steps of:

terminating an ATM inbound side of a third communication at the packet switch;
switching the third communication by the packet switch; and
terminating an ATM outbound side of the third communication at the packet switch.